KOWA OPTICAL WORKS

Komaflex-S

INSTRUCTIONS

...TED IN JAPAN

KOMAFLEX-S SINGLE-LENS REFLEX CAMERA

Komaflex-S is the world's only 1 5/8" x 1 5/8" (Super slide) single-lens reflex camera. Combining the best features of the conventional 35mm and twin-lens reflex, it is an all-purpose camera of unrivaled convenience and versatility. With its new Seikosha-SLV (EVS) shutter and high resolution Prominar lens, Komaflex-S insures professional results both in color and black-and-white. Through-the-lens viewing (free of parallax) guarantees perfect framing of all close-ups, portrait studies and scenic shots.

SPECIFICATIONS

1. Rare-earth 65mm Prominar f2.8 lens, color corrected and hard coated.
2. New Seikosha-SLV (EVS) shutter, fully synchronized, with speeds of 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500 sec., and B, and built-in self-timer. The shutter is cross-coupled for the Exposure Value System.
3. Semi-automatic film transport.
4. Automatic exposure counter.
5. Automatic pre-set aperture diaphragm: the subject is always seen at full aperture on a bright focusing screen. The Fresnel field lens provides a clear bright image to the very edges of the picture. The magnifier is used for critical focus.

6. Die-cast body with hinged rear cover and attractive two-tone finish.
7. Twelve exposures 1 5/8" x 1 5/8" on 127 Roll film.
8. Telephoto and wide-angle auxiliary lenses are available.

CAUTION

The sliding button for the release of the shutter cocking lever (part #18, Fig. 3) should be used only in the cases described in "LOADING THE CAMERA", Paragraph 9, and in "LOOKING INTO THE FINDER WHEN THE CAMERA IS NOT LOADED."

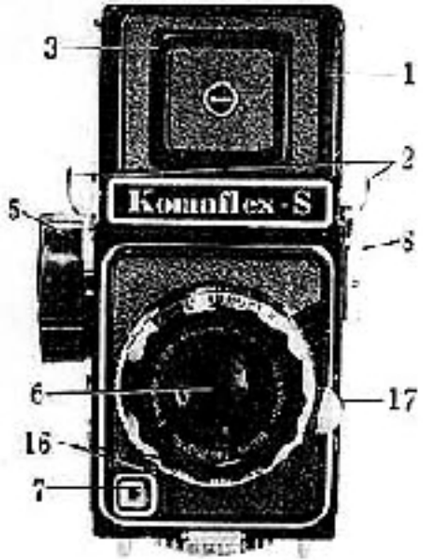

Fig. 1

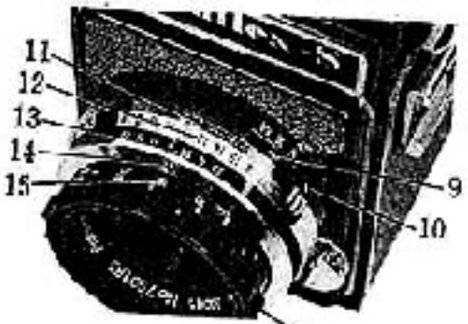

Fig. 2

PARTS NOMENCLATURE

1. Finder cover
2. Neck strap eyelet
3. Direct view-finder frame
4. Magnifier for critical focusing
5. Film winding ratchet knob
6. Lens
7. Shutter release button
8. Accessory shoe
9. Combined self-timer and synchro-setting lever
10. Flash terminal

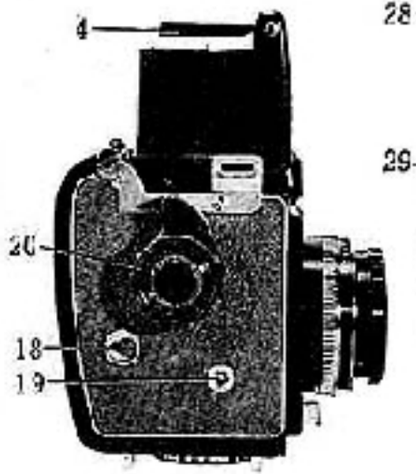

Fig. 3

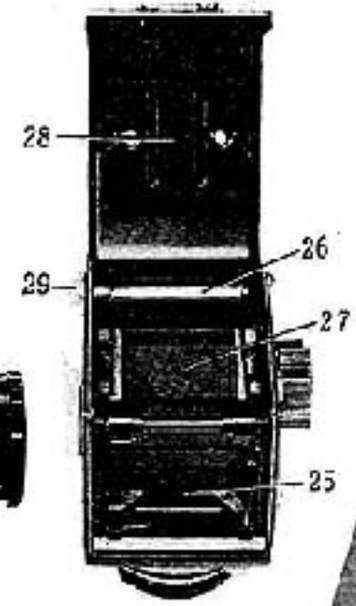

Fig. 4

11. Shutter speed scale
12. Exposure value scale
13. Diaphragm scale
14. Depth of field scale
15. Distance scale
16. Diaphragm setting lever
17. Shutter cocking lever
18. Sliding button for the release of shutter cocking lever
19. Automatic exposure counter
20. ASA Exposure Index recording disc

21. Focusing ring
22. Rear cover
23. Rear cover locking disc
24. Film number window
25. Film chamber
26. Take-up spool
27. Reflex mirror
28. Film pressure plate
29. Spool knob

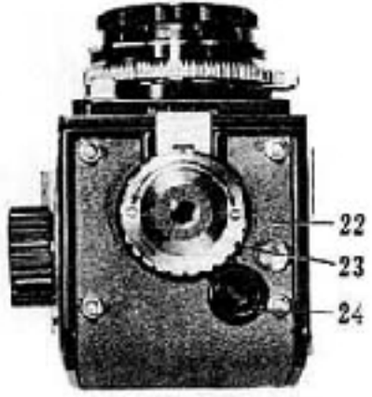

Fig. 5

LOADING THE CAMERA

Komaflex-S uses 127 roll film, color or black-and-white. When loading, always avoid direct sunlight.

Fig. 6

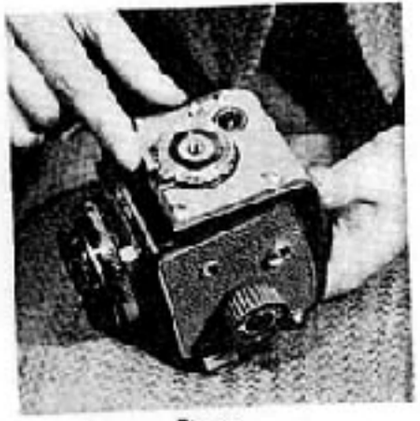

Fig. 7

1. Rotate the locking disc of the rear cover in the direction of "O" (open). (Fig. 6)
2. Raise the loosened lock and open the rear cover. (Fig. 7)

3. Put the empty spool in the take-up chamber while pulling out the spool knob. (Fig. 8)
4. Break the seal of the film and place the roll in the film chamber.
5. Slip the end of the film into the longer of the two slots of the empty spool (Fig. 9), holding the roll tightly to prevent it from loosening, and being careful not to unwind too much paper.

Fig. 8

Fig. 9

Fig. 10

6. Start to wind a little film on the take-up spool by slowly working the film winding ratchet knob, while checking to see that the film is correctly loaded. (Fig.10).
7. Close the rear cover and rotate the locking disc in the direction of "C" (close). This completes the loading of the film.

8. Unmask the film number window, by turning the adjacent knurled knob in the direction of the arrow (Fig. 11). Work the film winding ratchet knob as many times as necessary until number 1 appears in the film window. If the knob stops working before number 1 appears in the window, do not force it but press shutter release button. Now, repeat this operation until number 1 appears in the window.

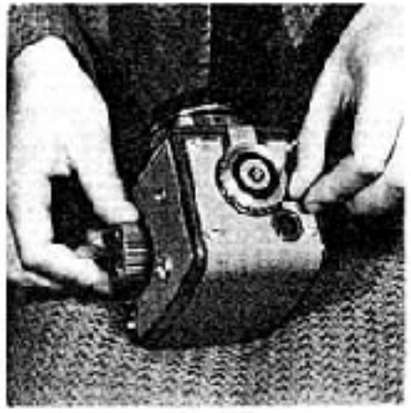

Fig. 11

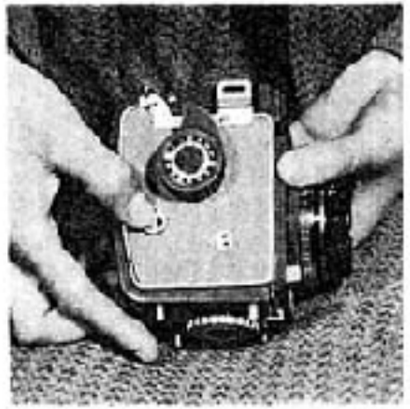

Fig. 12

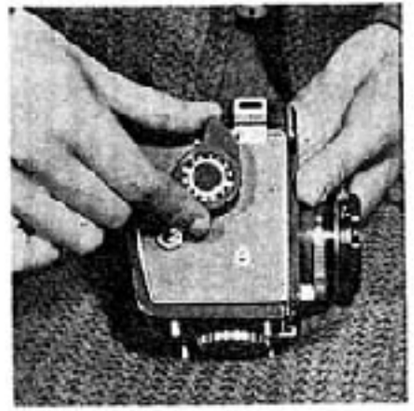

Fig. 13

9. Slide the button for the release of the shutter cocking lever back all the way, and a red triangular mark will appear in the exposure counter. (Fig.12).
10. Operate the ratchet knob until it stops. Number 1 will appear in the exposure counter (Fig.13). Your camera is loaded and ready for the first exposure.
11. As soon as the film has been loaded, it is advisable to set the ASA Exposure Index of your film on the recording disc located on the winding knob.

LOOKING INTO THE FINDER WHEN THE CAMERA IS NOT LOADED

Turn the film winding ratchet knob one full turn to bring down the mirror. Slide the button for the release of the shutter cocking lever back all the way, hold it there, and cock the shutter by pushing the lever down as far as it will go. You can now look into the finder.

CAUTION

Do not force the lever. If the release button is not held all the way back, damage will result from exerting pressure on the lever.

FOCUSING AND SHOOTING

1. Open the finder cover by lifting up the rear edge. (Fig. 14).
2. Operate the film winding ratchet knob until it stops (more than one turn will be necessary). This will advance the film one frame and lower the reflex mirror.
3. Cock the shutter by pushing the shutter cocking lever as far as it will go (Fig. 15). The diaphragm is now at full aperture and the image appears on the screen.

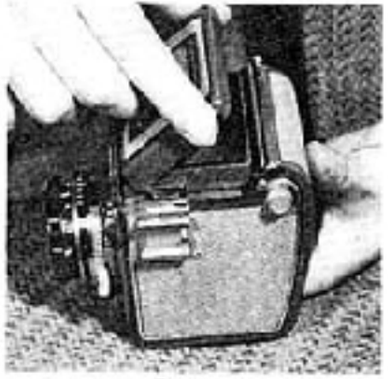

Fig. 14

Fig. 15

4. While looking into the screen, turn the focusing ring until the subject is at its sharpest. (Fig. 16).
5. When the shutter release button is depressed to take a photograph, the diaphragm closes to the pre-set aperture, the reflex mirror retracts and the shutter operates at the pre-set speed, instantaneously and automatically.
6. The view finder image is literally full-size. What you see in the finder is exactly what the film registers, always free of parallax.

Fig. 16

Fig. 17

Fig. 18

7. For hairline focusing, use the magnifier. Press in the top part of the direct view-finder frame plate; the magnifier will automatically swing into position. (Fig. 17).
8. To use the direct view-finder frame for rapid eye-level shooting, press the frame plate down flat. The frame plate can be returned to its original position by slightly pushing inward the sides of the finder cover. (Fig. 18).

DETERMINING THE EXPOSURE

Until the advent of the Exposure Value System (EVS), it was necessary to set the shutter speed and the aperture separately. The EVS system, however, which has been incorporated in the Komaflex-S, expresses with one number the proper relationship between the shutter speed and the aperture for correct exposure. The conventional methods of setting the speed and aperture seperately can, of course, also be used if so desired.

This camera is so designed that the shutter speed can be changed with the shutter cocked.

At the top part of the lens barrel, closest to the camera body, there is a red arrow; next, the shutter-speed scale; next, the Exposure Value Scale, and then the diaphragm scale with a yellow dot under number 8. The range of the Exposure Value System Scale is from 3 to 18. To determine the proper Exposure Value number for any scene to be photographed, measure the brightness of the scene with your exposure meter, holding it near the camera and pointed at the subject. If your meter indicates an Exposure Value of 12, for example, simply set the yellow dot of the camera diaphragm scale to number 12 of the Exposure Value scale by turning the diaphragm setting lever.

HOW TO USE THE EXPOSURE VALUE SCALE

Your camera is now set so that regardless of the shutter speed you wish to use (within the aperture range of the lens) the correct, corresponding f/number will automatically be positioned. In the case of Exposure Value 12, for instance, the available combinations of shutter speed and diaphragm aperture are: 1/500 sec. at f2.8, 1/250 at f4, 1/125 at f5.6, 1/60 at f8, 1/30 at f11, 1/15 at f16, and 1/8 at f22 (Fig. 19).

Any of these combinations may be used according to the circumstances and purposes of your photograph, with no change in effective exposure. For instance, if you wish to photograph at 1/60 sec., set the shutter speed at the red arrow by turning the knurled barrel; you will automatically obtain the correct aperture of f8.

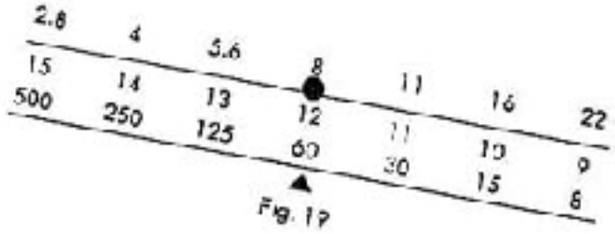

Fig. 19

Apertures
Yellow dot index
EVS numbers
Shutter speeds
Red arrow index

USING THE DEPTH OF FIELD SCALE

The depth of field in any photograph (the area which is in acceptable focus) varies with the aperture used and the distance from camera to subject.

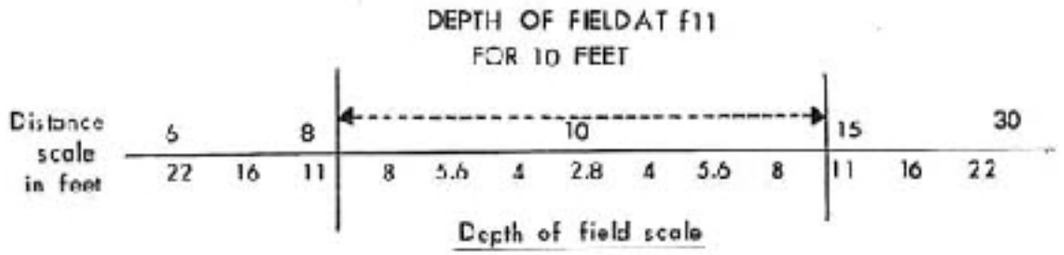

Fig. 20

As shown in Fig. 20, when focusing on a subject 10 feet away, with the aperture set at f11, the depth of field extends from about 8 to 15 feet. All objects within this range will be acceptably sharp. The depth of field is greater as the distance to the subject is increased, or the lens aperture is reduced. The depth of field corresponding to any given aperture and distance can easily be determined by referring to that portion of the distance scale falling between the two figures on the depth of field scale which correspond to the aperture being used.

HOW TO USE BULB AND SELF-TIMER

Rotate the knurled shutter speed ring until "B" (Bulb) is opposite the red pointer. Press the shutter release button and continue to hold it for as long a time as you wish to expose. The shutter will close as soon as the button is released. A tripod and a cable release are recommended when "B" is used. The self-timer is set by moving the synchro-lever to the "V" position prior to cocking the shutter. The self-timer allows ten seconds before the shutter is released.

FLASH PHOTOGRAPHY

Flash is used as the main source of illumination under poor lighting conditions or as a secondary light source outdoors in daylight to lighten heavy, dark shadows.

The Komoflex-S is equipped with "M" and "X" synchronization. "M" is synchronized at all speeds for flashbulbs such as No. 5 and No. 25. "X" is synchronized at all speeds and is used for electronic flash. "X" is also used for class "F" bulbs, for shutter speeds up to 1/50 sec. "V" (self-timer) is also "X" synchronized.

TELEPHOTO AND WIDE ANGLE AUXILIARY LENSES

When compared to the standard lens, the telephoto auxiliary lens increases the size of the subject image 1.5 times; the wide-angle auxiliary lens increases the field, or angle of view, 1.4 times. The auxiliaries are screwed directly into the standard lens barrel. The Komoflex-S, being a single-lens reflex, needs no mask or other framing device. The focusing screen shows exactly what the film will record, regardless of the lens used.

WIDE ANGLE
Fig. 21

STANDARD LENS
Fig. 22

TELEPHOTO
Fig. 23

HOW TO HOLD THE CAMERA

Be sure to hold your camera steady to avoid blurred pictures.

1. Waist-level position. This is the most common position for a reflex of this type. (Fig. 24).
2. Eye-level position. This position is used for snap-shots. When sighting in the direct view-finder, press the back of the camera firmly against your face. (Fig. 25).

Fig. 24

Fig. 25

Fig 26

Fig. 27

3. Ground-level position. Steady camera by putting it on a solid support. (Fig. 26).
4. Above eye-level position. This position is quite convenient in shooting over the heads of a crowd. (Fig. 27).

After number 12 has been exposed, operate the film winding ratchet knob until there is no more resistance, indicating that the entire film is rolled up on the take-up spool. After removing the film in subdued light, it must be sealed tightly. It is advisable to wrap the exposed film in a light-proof paper such as tin foil.

UNLOADING THE CAMERA

1. Take extreme care in cleaning the lens. Remove dust with a dry, soft brush or handblower, then wipe with lens tissue.
2. After taking photographs at the seashore or in damp weather, wipe the camera thoroughly with a dry, soft cloth.

CARE OF THE CAMERA

3. Do not leave the camera with the shutter cocked for a long period of time, as this will strain the mechanism.
4. If you should drop the camera in water, wash it with alcohol or another volatile liquid immediately, and have it repaired as quickly as possible.

CAUTION

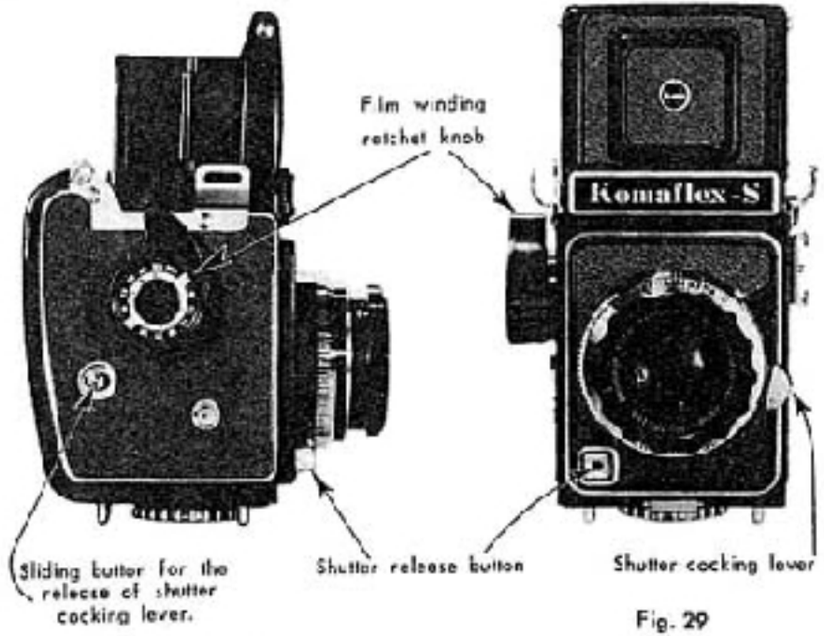

Fig. 28

Fig. 29

DO NOT FORCE SHUTTER COCKING LEVER

When there is no Film in the camera, the shutter cocking lever will not operate unless the sliding release button is held back all the way. Otherwise, damage will result from exerting pressure on the lever.

TO LOOK INTO THE FINDER WHEN THE CAMERA IS NOT LOADED:

1. Turn the film winding ratchet knob one full turn.
2. Slide the button for the release of the shutter cocking lever all the way back and hold it there.
3. Push the shutter cocking lever down as far as it will go.